

Name: \_\_\_\_\_

### pa1030: Box multiplication of linear binomials (v8)

#### Example

Use the box method to multiply  $(6x + 3)$  and  $(2x + 4)$ .

*	$6x$	$3$	
$2x$	$12x^2$	$6x$	$12x^2 + 6x + 24x + 12$
$4$	$24x$	$12$	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER:  $12x^2 + 30x + 12$

#### Question 1

Use the box method to multiply  $(9x + 5)$  and  $(3x + 8)$ .

*	$9x$	$5$	
$3x$	$27x^2$	$15x$	
$8$	$72x$	$40$	

ANSWER:  $27x^2 + 87x + 40$

### Question 2

Use the box method to multiply  $(-8x + 3)$  and  $(-7x - 2)$ .

*	$-8x$	$3$
$-7x$	$56x^2$	$-21x$
$-2$	$16x$	$-6$

ANSWER:  $56x^2 - 5x - 6$

### Question 3

Use the box method to multiply  $(7x + 9)$  and  $(5x - 4)$ .

*	$7x$	$9$
$5x$	$35x^2$	$45x$
$-4$	$-28x$	$-36$

ANSWER:  $35x^2 + 17x - 36$